

# **1999 EQUIPMENT INDEX FACTORS AND PERCENT GOOD FACTORS**

(Use for Lien Date January 1, 1999)

## ***INDEX FACTORS USED TO ESTIMATE REPLACEMENT COST NEW***

### ***Table 1: Commercial Equipment Index Factors***

These factors are derived using data provided courtesy of the Marshall and Swift Publication Co., *Marshall Valuation Service*. Indexes are to be used for each appropriate class of equipment.

### ***Table 2: Industrial Machinery and Equipment Index Factors***

These indexes are derived from data in the Bureau of Labor and Statistics' *Producer Price Indexes*.

### ***Table 3: Agricultural and Construction Equipment Index Factors***

These indexes are derived from data in the Bureau of Labor Statistics' *Producer Price Indexes*.

## ***PERCENT GOOD FACTORS USED TO ESTIMATE REPLACEMENT COST NEW LESS NORMAL DEPRECIATION***

### ***Table 4: Machinery and Equipment Percent Good Factors***

These factors are derived from a system developed by the Iowa State University Engineering Research Center. The rate of return used to compute these factors is calculated annually and is shown on the table.

### ***Table 5: Agricultural and Construction Mobile Equipment Percent Good Factors***

These factors are derived from a detailed analysis of used equipment sales data.

**TABLE 1: COMMERCIAL EQUIPMENT INDEX FACTORS**

1998 COST = 100

Year	Bank	Garage	Hospital	Hotel	Laundry & Dry Cleaning	Library	Office	Restaurant	Retail	Theater	Warehouse	Service	Year
1998	100	100	100	100	100	100	100	100	100	100	100	100	1998
1997	101	101	101	101	101	101	101	101	101	101	100	101	1997
1996	102	102	102	103	102	102	102	103	103	102	102	102	1996
1995	103	104	104	105	104	104	104	105	104	104	103	104	1995
1994	106	107	108	108	108	107	107	109	107	107	106	107	1994
1993	110	110	111	112	111	111	109	112	111	111	109	111	1993
1992	112	112	113	115	113	113	111	115	114	113	112	113	1992
1991	114	113	115	117	114	115	112	117	115	114	113	114	1991
1990	115	116	118	120	116	117	114	120	117	116	115	117	1990
1989	118	119	121	123	119	120	116	124	121	119	118	120	1989
1988	124	125	128	130	126	126	122	130	127	125	123	126	1988
1987	129	130	133	135	131	132	127	136	132	131	127	131	1987
1986	131	132	136	138	133	134	129	138	135	133	129	133	1986
1985	132	133	138	140	134	135	131	141	136	135	130	135	1985
1984	134	135	140	143	136	137	133	144	138	137	131	137	1984
1983	138	139	145	147	140	141	136	148	142	142	134	141	1983
1982	142	142	148	151	143	145	139	151	146	145	136	144	1982
1981	147	149	155	158	149	151	145	159	152	151	142	151	1981
1980	160	165	170	173	164	165	158	175	166	166	157	165	1980
1979	172	182	187	189	180	179	171	192	179	180	171	180	1979
1978	188	199	204	207	196	196	185	210	196	196	187	197	1978
1977	202	214	219	222	210	212	197	226	212	211	201	211	1977
1976	211	225	230	234	221	222	205	238	223	222	212	222	1976
1975	223	238	243	247	234	235	217	253	238	235	229	236	1975
1974	247	266	269	272	262	259	239	280	258	259	250	260	1974
1973	283	307	308	306	306	301	273	323	298	299	282	299	1973
1972	295	316	321	319	316	314	284	335	310	312	290	310	1972
1971	303	329	334	328	326	322	292	343	318	320	300	320	1971
1970	320	349	357	343	346	338	306	357	334	336	320	337	1970
1969	342	369	382	362	366	360	326	374	355	357	338	357	1969
1968	356	384	400	379	380	376	340	390	371	373	349	373	1968
1967	371	397	419	395	395	393	355	405	387	390	362	388	1967
1966	388	409	436	414	409	412	371	421	404	407	373	404	1966
1965	400	421	450	424	419	420	377	429	411	414	382	413	1965
1964	404	430	456	428	421	423	381	432	415	418	384	417	1964
1963	407	436	461	429	425	426	383	433	418	421	387	421	1963
1962	408	438	462	434	424	428	386	437	421	424	389	423	1962
1961	410	442	465	438	425	430	388	440	423	426	390	425	1961
1960	409	444	467	440	418	431	390	439	425	428	387	425	1960
1959	414	449	472	443	418	435	393	440	428	431	388	428	1959
1958	420	460	480	447	423	437	395	446	431	434	399	434	1958
1957	433	475	492	456	426	452	408	467	445	448	410	447	1957
1956	466	519	536	481	453	479	433	504	474	483	442	479	1956

**TABLE 2: INDUSTRIAL MACHINERY AND EQUIPMENT INDEX FACTORS**

YEAR	1998 COST = 100					
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
1998	100	100	100	100	100	100
1997	101	100	101	101	102	101
1996	102	101	102	102	103	102
1995	104	103	104	104	106	105
1994	107	104	107	106	108	107
1993	111	106	109	109	110	110
1992	113	108	111	111	113	112
1991	113	109	113	113	116	115
1990	114	111	115	116	119	118
1989	116	115	119	119	123	123
1988	119	119	123	124	127	128
1987	127	123	129	129	133	133
1986	132	125	132	132	137	136
1985	132	127	134	134	140	138
1984	134	130	137	138	145	141
1983	137	133	140	142	149	145
1982	139	136	143	145	153	147
1981	141	140	148	150	159	152
1980	153	152	161	163	173	166
1979	167	170	179	183	196	187
1978	185	187	197	202	215	207
1977	201	204	215	221	237	229
1976	215	218	231	239	258	249
1975	224	230	245	254	275	265
1974	236	248	263	274	299	288
1973	316	309	334	344	373	365
1972	335	326	356	367	402	388
1971	343	333	363	375	410	397
1970	358	341	374	385	422	409
1969	385	365	404	415	455	438
1968	398	377	420	431	476	455
1967	407	389	435	448	498	473
1966	415	402	450	465	519	492
1965	427	415	465	482	538	514
1964	433	421	471	490	548	526
1963	436	425	476	497	558	536
1962	436	426	480	501	567	538
1961	434	427	483	505	574	546
1960	427	427	480	504	573	549

**TABLE 3: AGRICULTURAL AND CONSTRUCTION EQUIPMENT INDEX FACTORS**

1998 COST = 100		
Year	Agricultural	Construction
1998	100	100
1997	101	102
1996	100	102
1995	104	106
1994	107	108
1993	110	110
1992	113	111
1991	117	115
1990	122	118
1989	125	123
1988	132	128
1987	136	132
1986	136	135
1985	137	137
1984	137	140
1983	140	141
1982	144	144
1981	153	151
1980	170	166
1979	190	186
1978	209	205
1977	226	225
1976	243	244
1975	265	260
1974	289	294
1973	358	373
1972	377	396
1971	391	406
1970	398	418
1969	427	453
1968	446	473
1967	463	500
1966	479	518
1965	493	534

**TABLE 4: MACHINERY AND EQUIPMENT PERCENT GOOD FACTORS**

**INDIVIDUAL PROPERTIES--AVERAGE SERVICE LIFE  
6.75% Rate of Return**

Year	Acq'd	AGE	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18	20	22	25	30	35	40	AGE	Acq'd	
1998	1	67	76	<b>81</b>	85	87	89	91	<b>92</b>	93	94	94	95	<b>95</b>	96	96	<b>97</b>	97	<b>98</b>	<b>99</b>	<b>99</b>	<b>99</b>	1	1998		
1997	2	37	52	<b>62</b>	69	74	78	81	<b>83</b>	85	87	88	89	<b>90</b>	92	93	<b>94</b>	95	<b>96</b>	<b>97</b>	<b>98</b>	<b>98</b>	2	1997		
1996	3	16	32	<b>45</b>	54	61	67	71	<b>75</b>	77	80	82	84	<b>85</b>	88	89	<b>91</b>	92	<b>94</b>	<b>95</b>	<b>97</b>	<b>98</b>	3	1996		
1995	4	6	17	<b>29</b>	40	49	56	61	<b>66</b>	70	73	76	78	<b>80</b>	83	85	<b>87</b>	89	<b>91</b>	<b>94</b>	<b>96</b>	<b>97</b>	4	1995		
1994	5		8	<b>17</b>	28	37	45	51	<b>57</b>	62	66	69	72	<b>75</b>	79	81	<b>84</b>	86	<b>89</b>	<b>92</b>	<b>94</b>	<b>96</b>	5	1994		
1993	6		2	<b>10</b>	18	27	35	42	<b>49</b>	54	59	63	66	<b>69</b>	74	76	<b>80</b>	83	<b>86</b>	<b>90</b>	<b>93</b>	<b>95</b>	6	1993		
1992	7			<b>5</b>	11	18	26	34	<b>40</b>	46	52	56	60	<b>64</b>	70	72	<b>76</b>	80	<b>84</b>	<b>89</b>	<b>92</b>	<b>94</b>	7	1992		
1991	8				6	12	19	26	<b>33</b>	39	45	50	54	<b>58</b>	65	68	<b>72</b>	76	<b>81</b>	<b>87</b>	<b>90</b>	<b>93</b>	8	1991		
1990	9					2	8	13	19	<b>26</b>	32	38	43	48	<b>53</b>	60	63	<b>69</b>	73	<b>78</b>	<b>85</b>	<b>89</b>	<b>92</b>	9	1990	
1989	10						4	9	14	<b>20</b>	26	32	37	42	<b>47</b>	55	58	<b>65</b>	69	<b>75</b>	<b>82</b>	<b>87</b>	<b>91</b>	10	1989	
1988	11							1	6	10	<b>15</b>	21	26	31	<b>37</b>	<b>42</b>	50	54	<b>60</b>	66	<b>72</b>	<b>80</b>	<b>86</b>	<b>89</b>	11	1988
1987	12							3	7	<b>11</b>	16	21	26	31	<b>36</b>	45	49	<b>56</b>	62	<b>69</b>	<b>78</b>	<b>84</b>	<b>88</b>	12	1987	
1986	13								4	<b>8</b>	12	17	22	26	<b>31</b>	41	45	<b>52</b>	59	<b>66</b>	<b>76</b>	<b>82</b>	<b>87</b>	13	1986	
1985	14								1	<b>6</b>	9	13	17	22	<b>27</b>	36	40	<b>48</b>	55	<b>63</b>	<b>73</b>	<b>81</b>	<b>86</b>	14	1985	
1984	15								3	7	11	14	18	<b>23</b>	32	36	<b>44</b>	51	<b>60</b>	<b>71</b>	<b>79</b>	<b>84</b>	15	1984		
1983	16								4	8	11	15	<b>19</b>	28	32	<b>40</b>	47	<b>57</b>	<b>69</b>	<b>77</b>	<b>83</b>	16	1983			
1982	17								2	5	9	12	<b>16</b>	24	28	<b>36</b>	44	<b>54</b>	<b>66</b>	<b>75</b>	<b>81</b>	17	1982			
1981	18									3	7	10	<b>13</b>	20	25	<b>33</b>	40	<b>50</b>	<b>64</b>	<b>73</b>	<b>80</b>	18	1981			
1980	19									1	4	8	<b>11</b>	17	21	<b>29</b>	36	<b>47</b>	<b>61</b>	<b>71</b>	<b>78</b>	19	1980			
1979	20									2	5	<b>9</b>	15	18	<b>26</b>	33	<b>44</b>	<b>58</b>	<b>69</b>	<b>77</b>	20	1979				
1978	21									3	<b>7</b>	12	15	<b>23</b>	30	<b>41</b>	<b>56</b>	<b>67</b>	<b>75</b>	21	1978					
1977	22									1	<b>4</b>	11	14	<b>20</b>	27	<b>37</b>	<b>53</b>	<b>65</b>	<b>73</b>	22	1977					
1976	23									2	9	11	<b>18</b>	24	<b>34</b>	<b>50</b>	<b>62</b>	<b>72</b>	23	1976						
1975	24									1	7	10	<b>15</b>	21	<b>31</b>	<b>47</b>	<b>60</b>	<b>70</b>	24	1975						
1974	25									5	7	<b>13</b>	19	<b>29</b>	<b>45</b>	<b>58</b>	<b>68</b>	25	1974							
1973	26									2	6	<b>12</b>	17	<b>26</b>	<b>42</b>	<b>55</b>	<b>66</b>	26	1973							
1972	27										4	<b>10</b>	14	<b>24</b>	<b>39</b>	<b>53</b>	<b>64</b>	27	1972							
1971	28										2	<b>8</b>	13	<b>21</b>	<b>37</b>	<b>51</b>	<b>62</b>	28	1971							
1970	29											6	11	<b>19</b>	<b>34</b>	<b>48</b>	<b>60</b>	29	1970							
1969	30											4	10	<b>18</b>	<b>32</b>	<b>46</b>	<b>58</b>	30	1969							
1968	31											2	7	<b>16</b>	<b>29</b>	<b>43</b>	<b>56</b>	31	1968							
1967	32											1	6	<b>14</b>	<b>27</b>	<b>41</b>	<b>54</b>	32	1967							
1966	33												5	<b>13</b>	<b>25</b>	<b>39</b>	<b>52</b>	33	1966							
1965	34												2	<b>11</b>	<b>23</b>	<b>37</b>	<b>50</b>	34	1965							
1964	35												1	<b>9</b>	<b>21</b>	<b>35</b>	<b>48</b>	35	1964							
1963	36													8	<b>20</b>	<b>32</b>	<b>46</b>	36	1963							
1962	37													6	<b>18</b>	<b>30</b>	<b>43</b>	37	1962							
1961	38													4	<b>16</b>	<b>28</b>	<b>42</b>	38	1961							
1960	39													2	<b>15</b>	<b>27</b>	<b>39</b>	39	1960							

**TABLE 5: AGRICULTURAL AND CONSTRUCTION MOBILE EQUIPMENT  
PERCENT GOOD FACTORS**

Year Acquired	Age	CONSTRUCTION MOBILE EQUIPMENT		AGRICULTURAL MOBILE EQUIPMENT				Age
		New	Used	EXCEPT HARVESTERS		HARVESTERS		
				New	Used	New	Used	
1998	1	74	91	78	92	74	90	1
1997	2	66	81	70	82	64	78	2
1996	3	60	74	64	75	57	69	3
1995	4	55	68	58	68	50	60	4
1994	5	51	62	52	62	43	53	5
1993	6	47	58	47	56	38	46	6
1992	7	42	52	42	50	33	40	7
1991	8	38	47	38	45	29	35	8
1990	9	35	43	34	40	25	30	9
1989	10	31	38	30	36	21	26	10
1988	11	28	34	27	32	19	23	11
1987	12	26	32	25	30	17	21	12
1986	13	24	29	23	28	15	18	13
1985	14	22	27	22	26		16	14
1984	15	20	25	20	23		14	15
1983	16	19	23	18	21		14	16
1982	17	16	20		19			17
1981	18	13	17		17			18
1980	19	12	13					19
1979	20	11	11					20
1978	21		9					21

NO MINIMUM PERCENT GOOD INTENDED

#### USE OF TABLE 5

The percent good table is designed to assist the appraiser in determining total loss of value once replacement cost new (RCN) has been determined for the captioned equipment.

The table, derived from used equipment sales data, identifies a pattern of depreciation for three groups of equipment. Within each group two columns of percent good figures, "New" and "Used," are listed. The column labeled "New" should be used to measure depreciation if the subject property was acquired new; conversely, the column labeled "Used" should be applied when the equipment was purchased used.